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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/006,040	12/04/2001	Thomas Birnbaum	000423	9559

23696 7590 06/18/2003

Qualcomm Incorporated
Patents Department
5775 Morehouse Drive
San Diego, CA 92121-1714

EXAMINER

CLINGER, JAMES C

ART UNIT PAPER NUMBER

2821

DATE MAILED: 06/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/006,040

Applicant(s)

Birnbaum et al.

Examiner

Jim Clinger

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Jun 6, 2003
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on May 21, 2002 is/are a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

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DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in-

- (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
- (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

2. Claims 1-10, 13-17, 19-28 and 30 are rejected under 35 U.S.C. 102(e) as being anticipated by Honda et al.(6,414,642).

Claims 1-2, 17, 28 and 30, figure 2 discloses a shield(16 and 18) and a spaced apart antenna(40) in electrical current communication.

Claims 3 and 19, a PIFA is disclosed(col. 1, lines 54-55).

Claims 4 and 20, a slot antenna is disclosed(fig. 2, no. 40).

Claims 5 and 21, a dipole antenna is disclosed(col. 1, lines 37-38).

Claims 6-7 and 22-23, the antenna and shield are formed from a metallic conductor.

Claims 8-10, stamping from a sheet and other related known procedures are disclosed(col. 4, lines 20-22).

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Claims 13 and 24, a feed(32) is disclosed as a source.

Claims 14-16 and 25-27, figure 1 discloses a printed wiring board(6) with electric circuitry as recited connected to the antenna feed(38).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 11-12, 18 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Honda in view of Kushihi et al.(6,433,746).

Honda does not disclose molded antenna components or a spacer.

Claims 11-12, figure 1 of Kushihi discloses a type of substrate(2) which is commonly manufactured by molding as the support for a shielded antenna element.

Claims 18 and 29, figure 1 of Kushihi discloses a spacer between the shield(8) and the antenna(1) for positioning the shield relative to the antenna(3).

It would have been obvious to one of ordinary skill in the art at the time of the invention to use the spacer and dielectric disclosed in Kushihi with the antenna device disclosed in Honda to position the shield and to support the antenna element as disclosed in Kushihi.

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Response to Arguments

5. Applicant's arguments filed June 6, 2003 have been fully considered but they are not persuasive.

Examiner disagrees with Applicant concerning the back reflectors(16 & 18) not acting as electromagnetic shields.

Prior art reference Honda discloses that the back reflectors(16 & 18) minimize antenna electric interaction with the device electronics(col. 4, lines 31-35). This is a definition of an electromagnetic shield. If the back reflectors meet the definition of an electromagnetic shield, then they are an electromagnetic shield.

Applicant argues that the back reflectors are part of the antenna and as such can not be shields because they are antenna parts. Examiner disagrees. Honda discloses an antenna assembly(10) with shield elements(16 & 18) and radiating elements on the opposing surface of the antenna device. The shield elements are distinct from the radiating elements. The radiating elements, which could also be called the antenna, and the shield elements are distinct parts of the antenna device. Also, it is irrelevant if the disclosed shield elements are part of the antenna, since there is no limitation recited in the claims of this application requiring them not to be as such. Independent claim 1 recites forming a shield and an antenna. This recitation does not require the shield and the antenna to be separate entities. Also, Honda does disclose a shield and an antenna as separate entities. Since they have different names and reference numbers, they are separate entities.

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Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Correspondence

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Jim Clinger whose phone number is (703) 305-0619.

Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center whose telephone number is (703) 308-0956.

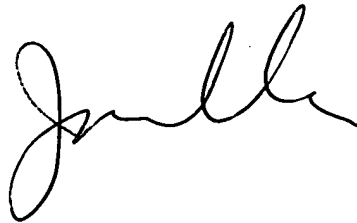
Papers related to Technology Center 2800 applications only may be submitted to Technology Center 2800 by facsimile transmission. Any transmission not to be considered an

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official response must be clearly marked "DRAFT". The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The Technology Center Fax Center number is (703) 308-7722 or (703) 308-7724.

A handwritten signature in black ink, appearing to be "J. Smith" or similar, written in a cursive style.